

I CLAIM:

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1. A method of controlling soilborne pathogens in a soil comprising the step of adding a nitrogen containing material and a pH reducing agent to said soil, said pH reducing agent being present in an amount sufficient to reduce soil pH below 5.5.
 2. The method of claim 1 wherein said pH reducing agent is present in an amount sufficient to reduce soil pH below 5.0.
 3. The method of claim 2 wherein said pH reducing agent is incorporated in said nitrogen containing material.
 4. The method of claim 2 wherein said nitrogen containing material is selected from a group consisting of animal manures, sewage sludge, animal by-products, chitinous materials, oil- seed materials, urea, NH_4x and xNO_2 compounds.
 5. The method of claim 2 wherein said nitrogen containing material is added at a rate of between 200 kg N/ha and 1000 kg N/ha.
 6. The method of claim 2 wherein said nitrogen containing material is an animal manure.
 7. The method of claim 2 wherein said nitrogen containing material is a meat and bone meal material.
 8. The method of claim 2 wherein said nitrogen containing material is soya meal.
 9. The method of claim 5 wherein said nitrogen containing material is applied at a rate of between 400 kg N/ha and 800 kg N/ha.

10. The method of claim 7 wherein said nitrogen containing material is applied at a rate of between 600 kg N/ha and 1000 kg N/ha.

11. The method of claim 2 wherein said pH reducing agent is applied to said soil and said nitrogen containing material and subsequently added to said soil.

12. The method of claim 2 wherein said pH reducing agent is added to said soil subsequent to said nitrogen containing material.

13. The method of claim 2 wherein said pH reducing agent is selected from a group consisting of sulfuric acid, ascorbic acid, sorbic acid, citric acid, and SO_2 .

14. The method of claim 2 wherein said pH reducing agent is an organic acid.

15. The method of claim 14 wherein said organic acid is citric acid.

16. A method of determining an effective method for control of soil pathogens in a soil comprising the steps of:

measuring the pH of a soil;

measuring the organic carbon content of said soil;

measuring the buffering capacity of said soil;

adding a nitrogen containing material and a pH reducing agent to reduce soil pH below 5.5 when said buffering capacity is below 2 uL H_2SO_4 g/soil; and

adding a nitrogen containing material and a pH raising agent to raise said pH above 8.5 when said organic carbon content is less than 1.7% by weight.

17. A method of controlling soilborne pathogens in a soil having an organic carbon content less than 1.7% by weight, comprising the step of adding a nitrogen containing material and a pH raising agent to raise soil pH above 8.5.

18. The method of Claim 17 wherein said nitrogen containing material is selected from a group consisting of animal manures, sewage sludge, animal by-products, chitinaceous materials, oil- seed materials, urea, NH_4x and xNO_2 compounds.
19. The method of Claim 17 wherein said nitrogen containing material is a meat and bone material.

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